

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions and listings of claims in the application.

1. (Currently Amended) An isolated polypeptide, wherein the amino acid sequence of the polypeptide comprises a wild-type human constitutively active nuclear orphan receptor (CAR) polypeptide sequence of GenBank Accession No. Z30425 (SEQ ID NO: 18) comprising one or more mutations, wherein the one or more mutations render the isolated polypeptide less constitutively active than the wild-type CAR polypeptide.

2. (Currently Amended) The isolated polypeptide of claim 1, wherein the one or more mutations correspond to human CAR (hCAR) position Leu342 and hCAR position Leu343 of GenBank Accession No. Z30425 (SEQ ID NO: 18).

3-5. (Canceled)

6. (Currently Amended) The isolated polypeptide of claim 1, wherein the one mutation corresponds to hCAR position Leu342 or hCAR position Leu343 of GenBank Accession No. Z30425 (SEQ ID NO: 18).

7. (Canceled)

8. (Previously Presented) The isolated polypeptide of claim 6, wherein the mutation is a Leu342 to Ala342 (L342A) mutation or a Leu343 to Ala343 (L343A) mutation.

9. (Previously Presented) The isolated polypeptide of claim 1, wherein the isolated polypeptide further comprises one or more conservative amino acid substitutions which do not substantially alter the constitutive activity of the polypeptide.

10. (Previously Presented) The isolated polypeptide of claim 1, wherein the polypeptide induces xenochemical metabolizing activity of a xenochemical-metabolizing enzyme, and wherein the xenochemical metabolizing activity can be detected *in vitro*.

11. (Previously Presented) The isolated polypeptide of claim 10, wherein expression of the xenochemical-metabolizing enzyme is regulated by an enhancer element.

12. (Previously Presented) The isolated polypeptide of claim 10, wherein the xenochemical-metabolizing enzyme metabolizes a xenochemical selected from the group consisting of phenobarbital and 1,4-bis [2-(3,5-dichloropyridyloxy)] benzene (TCPOBOP).

13. (Previously Presented) The isolated polypeptide of claim 1, wherein the polypeptide induces steroid metabolizing activity of a steroid-metabolizing enzyme, and wherein the steroid metabolizing activity can be detected *in vitro*.

14. (Previously Presented) The isolated polypeptide of claim 13, wherein the steroid-metabolizing enzyme metabolizes a steroid selected from the group consisting of estrogen and estradiol.

15. (Previously Presented) The isolated polypeptide of claim 1, wherein the polypeptide is at least 70% pure.

16. (Previously Presented) A kit comprising the isolated polypeptide of claim 1, and a CAR-responsive steroid and/or a xenochemical.

17. (Previously Presented) A composition comprising the isolated polypeptide of claim 1.

18-35. (Canceled)

36. (Previously Presented) The composition of claim 17 comprising a pharmaceutically acceptable carrier.

37. (Currently Amended) An isolated polypeptide, wherein the amino acid sequence of the polypeptide comprises a wild-type human constitutively active nuclear orphan receptor (hCAR) polypeptide sequence of GenBank Accession No. Z30425 (SEQ ID NO: 18) comprising one or more mutations corresponding to hCAR position Leu342 and/or Leu343, wherein the one or more mutations render the isolated polypeptide less constitutively active than the wild-type hCAR polypeptide.

38. (Previously Presented) The isolated polypeptide of claim 37 comprising a Leu342 to Ala342 mutation and/or a Leu343 to Ala343 mutation.